

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

UNITED STATES OF AMERICA)	Case No. 09 CR 10243 MLW
)	
v.)	
)	18 U.S.C. §371 (Conspiracy)
RYAN HARRIS, a/k/a DerEngel,)	18 U.S.C. §§1030, 2 (Computer Intrusion,
)	Aiding and Abetting)
and)	18 U.S.C. 18 U.S.C. §§1343, 2 (Wire Fraud,
)	Aiding and Abetting)
TCNISO, INC.,)	
Defendants)	18 U.S.C. §§982(a)(2)(B), 981(a)(1)(C),
)	28 U.S.C. §2461(c) (Criminal Forfeiture)

INDICTMENT

The Grand Jury charges:

INTRODUCTION

At all times relevant to the charges in this Indictment:

1. TCNISO, INC., (“TCNISO”) was a company incorporated in California and had its principal place of business in the San Diego area. Its primary business was to develop, distribute, and sell “cable modem hacking” software and hardware products. These products were designed to modify cable modems so that users could access Internet Service Providers’ networks without authorization in order to obtain internet service without making the required payment. Additionally, TCNISO offered ongoing customer support to assist its users with their cable modem hacking.
2. RYAN HARRIS, a.k.a. “DerEngel,” lived in California, and Hong Kong. He was the founder, owner, president, and a software developer for TCNISO.
3. Unindicted Co-Conspirator One (“UC1”) lived in Kentucky, and was a software developer for TCNISO.
4. Unindicted Co-Conspirator Two (“UC2”) lived in California, and was vice president

of TCNISO from approximately 2003 until approximately 2007.

5. The third unindicted co-conspirator, who was known by the online moniker “DShocker,” lived in Worcester, Massachusetts.

6. Certain Internet Service Providers (“ISPs”) provide internet service through cable networks, which are the same systems that deliver cable television signals. ISPs charge subscribers a monthly fee for this internet access and typically charge an additional premium if subscribers want faster internet access.

7. In order to access the internet through a cable network, a subscriber installs a cable modem, which connects the subscriber’s computer to the ISP’s cable network. ISPs offer the modems to the subscriber and charge a rental fee. Each cable modem is assigned a theoretically unique MAC (or “media access control”) address that identifies the specific modem to the ISP. This unique MAC address is designed to allow the ISP to associate the particular cable modem with a particular paying cable subscriber and to ensure that only paying subscribers are accessing the ISP’s cable network.

8. When a computer user seeks to access the internet, the user’s modem will report its MAC address to the ISP, and if the ISP recognizes the modem’s MAC address as belonging to a paying subscriber, the ISP will allow the user to access the internet via the ISP’s network. The ISP will also deliver a unique “configuration file” to the modem that determines, among other things, the speed with which the internet access will be delivered.

9. “Cable modem hacking” includes the alteration of the modem’s software for the purposes of accessing an ISP’s network without authorization in order to obtain internet service without an account and without paying for that service. In order to steal internet service, the

computer user's modem is modified so that it uses, without authorization, a MAC address that belongs to the cable modem of a legitimate, paying internet service subscriber. This is often referred to as MAC address "cloning" (or "spoofing").

10. "Cable modem hacking" also includes the modification of a modem to use, without authorization, a configuration file that the ISP would provide only to a legitimate, paying subscriber. By modifying a modem to use a configuration file associated with premium, higher-speed service, a hacker can increase (or "uncap") the speed at which the internet service is provided without paying the required premiums.

11. Additionally, "cable modem hacking" – particularly MAC address cloning or spoofing – can be used to mask the user's online identity.

COUNT ONE
(Conspiracy)
18 U.S.C. §371

12. The Grand Jury realleges and incorporates by reference the allegations in paragraphs 1-11 of this Indictment, and further charges that:

13. From approximately 2003 through approximately August 2009, in the District of Massachusetts and elsewhere,

RYAN HARRIS and TCNISO,

and others known and unknown to the Grand Jury, did knowingly conspire to commit the following offenses against the United States:

- a. Computer Fraud (18 U.S.C. §1030(a)(4)) – knowingly and with intent to defraud, accessing a protected computer without authorization, and exceeding authorized access, and by means of such conduct, furthering the intended fraud and obtaining something of value; and
- b. Wire Fraud (18 U.S.C. §1343) – having devised a scheme to defraud and to obtain money and property by means of false or fraudulent pretenses, representations and promises, transmitting and causing to be transmitted in interstate commerce, wire communications, including writings, signals, and sounds, for the purpose of executing the scheme to defraud.

MANNER AND MEANS OF THE CONSPIRACY

14. HARRIS, TCNISO, and others developed cable modem hacking products – including “Sigma,” “Blackcat,” and “DreamOS” – that enabled computer users to access, without permission, an ISP’s cable network and obtain internet service without making the required payment. Among

other techniques, TCNISO's products enabled users to disguise their cable modem by mimicking, or "cloning," the unique identifiers, including the MAC address, of the modem of a legitimate, paying internet subscriber. The TCNISO user thereby received internet service without paying for it.

15. TCNISO's products also enabled its users to obtain faster, upgraded (or "uncapped") internet service without paying the premiums charged by the ISP. These products enabled TCNISO's users to use, without authorization, configuration files that the ISP would otherwise only provide to a legitimate subscriber paying for premium access. The TCNISO user therefore received the type of faster internet service for which a legitimate user was paying a premium.

16. HARRIS, TCNISO, and others developed additional software tools that users could use to steal (or "sniff") the MAC addresses and/or configuration files belonging to legitimate, paying subscribers and use these identifiers, in conjunction with TCNISO's other products, to obtain free and/or faster internet access, without authorization.

17. HARRIS, TCNISO, and others distributed their cable modem hacking products on their website, tcniso.net, as well as at the TCNISO store in San Diego, California. TCNISO charged users for some of these products and made others (particularly older products) available for free. The company sold both the software as stand-alone products and the software pre-loaded onto cable modems.

18. HARRIS, TCNISO, and others also provided ongoing support to assist their users with cable modem hacking, primarily through their website, tcniso.net. The TCNISO website contained forums, or bulletin boards, that allowed HARRIS, the co-conspirators, and TCNISO's users to exchange information about product updates and provide tutorials and advice about

installing and using TCNISO's cable modem hacking products. The tcniso.net forums also allowed TCNISO users to discuss acquiring and exchanging stolen MAC addresses and configuration files.

19. HARRIS and the co-conspirators moderated and personally participated in these online discussion forums.

20. HARRIS and TCNISO also offered for sale a book entitled "Hacking the Cable Modem," which HARRIS wrote under his alias, "DerEngel," and for which UC1 was the "technical reviewer."

21. HARRIS and the co-conspirators knew that users, including DShocker, successfully used TCNISO's products to gain unauthorized access to various ISPs' networks in order to obtain internet service for free and to obtain faster internet access without paying premiums.

22. This scheme injured numerous ISPs around the country, and from approximately 2003 through 2009, generated more than \$1 million in revenue for TCNISO.

OVERT ACTS

The defendants committed the following overt acts within the District of Massachusetts and elsewhere:

Development of TCNISO Products

23. Beginning in approximately November 2003, TCNISO, HARRIS, UC1, and UC2 developed and distributed Sigma 1.0, a cable modem hacking software application.

24. Beginning in approximately November 2004, TCNISO, HARRIS, UC1, and UC2 developed and distributed Blackcat, a combination of hardware and software that enabled TCNISO users to modify newer, more secure cable modems.

25. Beginning in approximately 2005, TCNISO, HARRIS, UC1, and UC2 developed and

distributed Sigma X, a more sophisticated version of the Sigma software, which had the ability to block ISPs from “probing” a modem to determine whether it was hacked.

The TCNISO.net Forums

26. From in or about 2006 to in or about 2008, TCNISO, HARRIS, and others hosted on the tcniso.net forums comments from users who stated that they were using or attempting to use TCNISO’s products to steal internet access from various ISPs.

27. From in or about 2006 to in or about 2008, TCNISO, HARRIS, and others hosted on the tcniso.net forums comments from users who stated that they were using or attempting to use TCNISO’s products to obtain faster internet access from various ISPs without paying for the faster service.

28. From in or about 2006 to in or about 2008, TCNISO, HARRIS, and others hosted on the tcniso.net forums comments from users who stated that they had stolen or “sniffed” for the MAC addresses of legitimate, paying internet subscribers and were looking to trade these stolen MAC addresses with other TCNISO users.

29. On or about March 27, 2007, HARRIS, identifying himself by his alias “DerEngel,” posted on the tcniso.net forum a comment asking for any “verified MAC addresses and/or config files” for a major metropolitan area, promising that “rewards will follow.”

DShocker’s Use of TCNISO Products

30. From approximately 2005 through 2008, HARRIS, UC1, and UC2 communicated repeatedly on line with DShocker about cable modem hacking.

31. In approximately 2005, DShocker downloaded the Sigma software to his home computer. He then used TCNISO’s forums and other means to trade for stolen MAC addresses

belonging to legitimate Charter Communications (“Charter”) internet subscribers and used Sigma to change his modem’s MAC address to a new Charter MAC address. DShocker was then able to connect to the internet via Charter without paying.

32. DShocker also used Sigma to change his modem’s configuration file, and in doing so, “uncapped” his modem. This increased his internet access speeds approximately ten-fold; DShocker did not pay the premium for this faster service.

33. In approximately 2007, DShocker downloaded to his home computer a new version of the Sigma program – Sigma X. DShocker used Sigma X to modify a new cable modem and obtain free, uncapped, internet access from Charter.

34. DShocker and UC2 discussed hacking into another ISP, RoadRunner, in order to obtain free internet service.

35. On or about January 15, 2007, DShocker accessed the internet, using TCNISO’s products and a cloned MAC address, and participated in an online chat in which he discussed hacking into Motorola’s computer servers.

36. On or about December 5, 2007, DShocker accessed the internet, using TCNISO’s products and a cloned MAC address, and participated in an online chat in which he discussed hacking into Charter’s computer servers.

FBI Undercover Buys

37. On or about November 24, 2008, TCNISO, through its website, sold two Motorola SB5100 BlackcatUSB cable modems, three Motorola SB4200 Sigma cable modems, and one “Hacking the Cable Modem” book to an undercover FBI agent in Boston, Massachusetts.

38. On or about November 24, 2008, an undercover FBI agent in Boston called TCNISO

at the phone number provided on the tcniso.net website. HARRIS answered the phone and helped process the purchase of the modems and the book.

39. On or about December 14, 2008, TCNISO sent the purchased modems and the book to the undercover FBI agent in Boston. These modems were capable of hacking a cable network and obtaining free internet service.

All in violation of 18 U.S.C. §371.

COUNT TWO
(Aiding and Abetting Computer Fraud)
18 U.S.C. §§1030(a)(4) and 2

40. The Grand Jury realleges and incorporates by reference the allegations in paragraphs 1-11 and 14-39 of this Indictment, and further charges that:

41. From approximately 2005 through approximately 2008, in the District of Massachusetts and elsewhere,

RYAN HARRIS and TCNISO,

did aid and abet others in knowingly and with intent to defraud, accessing a protected computer without authorization, and exceeding authorized access, and by means of such conduct, furthering the intended fraud and obtaining anything of value.

All in violation of 18 U.S.C. §§1030(a)(4) and 2.

COUNTS THREE-SIX
(Aiding and Abetting Wire Fraud)
18 U.S.C. §§1343 and 2

42. The Grand Jury realleges and incorporates by reference the allegations in paragraphs 1-11 and 14-39 of this Indictment, and further charges that:

43. On or about the dates set forth below, in the District of Massachusetts and elsewhere,

RYAN HARRIS and TCNISO,

did knowingly aid and abet others in, having devised a scheme to defraud and to obtain money and property by means of material false and fraudulent pretenses, representations and promises, transmitting and causing to be transmitted in interstate commerce, wire communications, including writings, signals, and sounds, for the purpose of executing the scheme to defraud, as set forth below:

Count	Approximate Date	Wire Transmission
3	2005	DShocker accessed the internet and downloaded TCNISO's Sigma cable modem hacking product
4	2007	DShocker accessed the internet and downloaded TCNISO's Sigma X cable modem hacking product
5	January 15, 2007	DShocker accessed the internet, using TCNISO's products and a cloned MAC address, and participated in an online chat, discussing his hacking activities
6	December 5, 2007	DShocker accessed the internet, using TCNISO's products and a cloned MAC address, and participated in an online chat, discussing his hacking activities

All in violation of 18 U.S.C. §§1343 and 2.

FORFEITURE ALLEGATIONS

18 U.S.C. §981(a)(1)(C), 28 U.S.C. §2461(c), 18 U.S.C. §982(a)(2)(B), 18 U.S.C. §1030(i)

44. Upon conviction of any offense in violation of 18 U.S.C. §§371 or 1343,

RYAN HARRIS and TCNISO,

shall forfeit to the United States, pursuant to 18 U.S.C. §§981(a)(1)(C) and 28 U.S.C. §2461(c), any property, real or personal, that constitutes, or is derived from, proceeds traceable to the commission of the offenses.

45. Upon conviction of any offense in violation of 18 U.S.C. §§371 or 1030,

RYAN HARRIS and TCNISO,

shall forfeit to the United States, pursuant to 18 U.S.C. §982(a)(2)(B), any property constituting or derived from, proceeds obtained directly or indirectly, as a result of such violation.

46. Upon conviction of any offense in violation of 18 U.S.C. §§371 or 1030,

RYAN HARRIS and TCNISO,

shall forfeit to the United States, pursuant to 18 U.S.C. §1030(i), (a) any personal property used or intended to be used to commit or facilitate the commission of such violation, and (b) any property, real or personal, constituting or derived from, proceeds obtained directly or indirectly, as a result of such violation. Such property includes, without limitation, the domain name tcniso.net.

47. If any of the property described in the three preceding paragraphs as being forfeitable, as a result of any act or omission of the defendants --

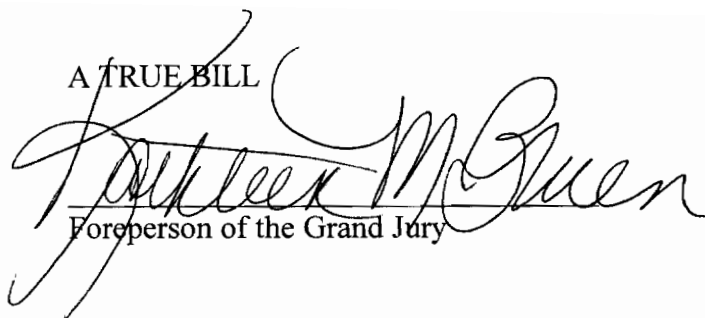
- a. cannot be located upon the exercise of due diligence;
- b. has been transferred to, sold to, or deposited with a third party;
- c. has been placed beyond the jurisdiction of this Court;
- d. has been substantially diminished in value; or

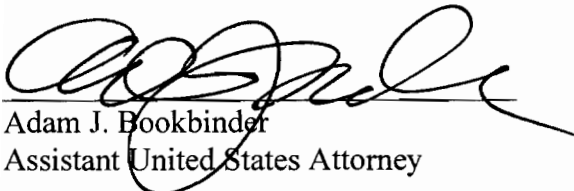
e. has been commingled with other property which cannot be divided without difficulty;

it is the intention of the United States, pursuant to 28 U.S.C. §2461(c) and 18 U.S.C. §§982(b) and 1030(2), incorporating 21 U.S.C. §853(p), to seek forfeiture of all other property of the defendants up to the value of the property described in subparagraphs a through e of this paragraph.

All pursuant to 18 U.S.C. §§981, 982 and 1030, and 28 U.S.C. §2461(c).

A TRUE BILL


Foreperson of the Grand Jury


Adam J. Bookbinder
Assistant United States Attorney

DISTRICT OF MASSACHUSETTS

August 19, 2009

@ 10:50am

Returned into the District Court by the Grand Jurors and filed.


Deputy Clerk